CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A first computer node for operating in a system comprising a ~~plurality of network clusters~~a first network and a second network~~, wherein a number of network clusters comprise~~ each having a local time base and comprising a plurality of computer nodes, the first computer node comprising:

a synchronisation unit ~~for comparing~~operable to:

compare first network timing information for ~~a first network~~ indicative of a first local time base associated with the first network with second network timing information ~~for a~~indicative of a second local time base associated with second network and ~~for communicating to a plurality of other computer nodes in the first network~~to determine a sign of the difference between the first network timing information and the second network timing information;

in response to the difference between the first network timing information and the second network timing information exceeding a threshold, determine a first fixed code value based on a sign of the difference between the first network timing information and the second network timing information; and

in response to the difference between the first network timing information and the second network timing information exceeding the threshold, communicate the first fixed code value to a second computer node to request a change in ~~to allow the plurality of other computer nodes in the first network to alter their~~ network timing information associated with the second computer node by a predetermined fixed step value ~~directed by the sign of the difference wherein a network timing difference between the first network and the second network is thereby reduced responsive to the sign of the difference received and in~~ sufficiently small ~~predetermined step values in~~

~~accordance with the sign~~ to avoid loss of local synchronisation with the plurality of other computer nodes in the first network.

2. (Canceled)

3. (Currently Amended) A computer node according to claim 1, wherein the network timing information corresponds to the phase of [[the]]a network clock.

4. (Currently Amended) A first computer node according to claim 1, wherein the ~~synchronisation unit is arranged to provide the sign of the difference to the second network to allow the second network to alter its network timing information to allow the network timing difference between the first network and the second network to be reduced~~request to change the network timing information comprises a request to reduce the difference between the first network timing information and the second network timing information.

5. (Currently Amended) A first computer node according to claim 1, wherein the computer node is arranged to be coupled to the first network.

6. (Currently Amended) A first computer node according to claim 1, wherein the computer node is arranged to be coupled to the second network via a second computer node.

7. (Currently Amended) ~~A system comprising a plurality of network clusters comprising~~A device comprising:

~~a first network, a second network; and~~

an interface coupled to a first network and operable to receive a fixed code value based on a sign of the difference between first network timing information associated with the first network and second network timing information associated with a second network; and

a synchronization unit coupled to the interface and operable to adjust network timing information associated with the first network by a predetermined fixed amount based on the code value.

~~a computer node having a synchronisation unit for comparing network timing~~

~~information for the first network with network timing information for the second network and for communicating to a plurality of other computer nodes in the first network a sign of the difference between the first network timing information and the second network timing information such that a network timing difference between the first network and the second network is thereby reduced by the plurality of other computer nodes in the first network responsive to the sign of the difference received and in sufficiently small predetermined step values in accordance with the sign to avoid loss of local synchronisation with the plurality of other computer nodes in the first network, the reduction of the timing differences being directed by the sign of the network timing difference between the first network and the second network.~~

8. (Canceled)

9. (Currently Amended) A ~~system~~ device according to claim 7, wherein the ~~first network has a plurality of nodes and the first network timing information is used to maintain synchronisation of the plurality of nodes, wherein the change in network timing information is sufficiently small to allow the plurality of nodes to maintain synchronisation should one of the plurality of nodes not change its timing information in response to the sign of the difference communicated by the computer node~~code value is a fixed code value.

10. (Currently Amended) A method ~~for allowing synchronisation of a first network and a second network in a system comprising a plurality of network clusters, wherein a number of network clusters comprise a plurality of computer nodes, the method~~ comprising:

comparing network timing information for the first network with network timing information for the second network; and

~~communicating to a plurality of other computer nodes in the first network a sign of the difference between the first network timing information and the second network timing information wherein a network timing difference between the first network and the second network is thereby reduced by the plurality of other computer nodes in the first network responsive to the sign of the difference received and in sufficiently small predetermined step values in accordance with the sign to avoid~~

~~loss of local synchronisation with the plurality of other computer nodes in the first network, the reduction of the timing difference being directed by the sign of the network timing difference between the first network and the second network~~receiving at a first network node a first fixed code value indicating a sign of the difference between first network timing information associated with a first network and second network timing information associated with a second network;

adjusting the first network timing information by a predetermined fixed amount based in response to receiving the first code value.

11. (Currently Amended) A first computer node according to claim 1, wherein ~~the first network comprises a first communication cycle and the second network comprises a second network cycle, the sign of~~ the difference between the first network timing information and the second network timing information indicates that [[the]]a first communication cycle associated with the first network is ahead of [[the]]a second communication cycle associated with the second network.

12. (Currently Amended) A first computer node according to claim 1, wherein the synchronization unit is arranged to measure a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network.

13. (Currently Amended) A ~~system~~ device according to claim 7, wherein the ~~first network comprises a first communication cycle and the second network comprises a second network cycle, the~~ sign of the difference between the first network timing information and the second network timing information indicates that [[the]]a first communication cycle associated with the first network is ahead of [[the]]a second communication cycle associated with the second network.

14. (Currently Amended) A ~~system~~ device according to claim 7, wherein the synchronization unit is arranged to measure a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network.

15. (Currently Amended) A method according to claim 10, further comprising determining ~~wherein the first network comprises a first communication cycle and the second network comprises a second network cycle,~~ the sign of the difference between the first network timing information and the second network timing information ~~indicates that the first communication cycle is ahead of the second communication cycle~~.

16. (Currently Amended) A method according to claim 15 ~~10, wherein the synchronization unit measures a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network~~further comprising determining the code value based on the sign of the difference between the first network timing information and the second network timing information.

17. (New) The first computer node of claim 1, wherein the synchronization unit is operable to communicate a second fixed code value to the second computer node in response to determining the difference between the first network timing information and the second network timing information not exceeding the threshold.

18. (New) The first computer node of claim 17, wherein the first fixed code value and the second fixed code value are each two bit binary values.

19. (New) The first computer node of claim 1, wherein the first fixed code value is a two bit binary value.

20. (New) The first computer node of claim 1, wherein the first fixed code value is a first value when the sign of the difference is positive and a second value when the sign of the difference is negative, and wherein second value is a complement of the first value.

21. (New) The device of claim 7, wherein the fixed code value is a first value when the sign of the difference is positive and a second value when the sign of the difference is negative, and wherein second value is a complement of the first value.

22. (New) The method of claim 10, wherein the first fixed code value is a first value when the sign of the difference is positive and a second value when the sign of the difference is negative, and wherein second value is a complement of the first value.